



**OPERATING PERMIT (Conditional Major)** Issued Pursuant to Tennessee Air Quality Act

**Date Issued:** DRAFT

**Permit Number:**  
451272

**Date Expires:** DRAFT

**Issued To:** IMCO Recycling, Inc.

**Installation Address:**  
388 Williamson Road  
Loudon

**Installation Description:**

Secondary Aluminum Processors Consisting of Source 02:  
Rotary Furnaces R1 and R3 with baghouse control, Source  
03: Reverberatory Furnace (sidewell) #120 with baghouse  
control

**Emission Source Reference No.:**  
53-0079-00

40 CFR Part 63 Subpart RRR  
**CONDITIONAL MAJOR SOURCE**

**Insignificant Activities:**

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

1. The application(s) that were utilized in the preparation of this permit are dated July 12, 2004, and September 30, 2004, and signed by Mr. Shane Spencer, Environmental Manager of the permitted facility. If this person terminates his/her employment or is reassigned different duties such that he/she is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(continued on the next page)

DRAFT \_\_\_\_\_  
TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

**NON TRANSFERABLE**

**POST AT INSTALLATION ADDRESS**

Section I: The following conditions shall apply to all sections of this permit unless otherwise noted.

2. The permittee has elected to opt-out of being issued a major source operating permit pursuant to Division Rule 1200-3-9-.02(11)(a). The permittee would be considered a major source because their “potential to emit” value(s) for a single hazardous air pollutant (HAP) and particulate matter were greater than 10 tons and 100 tons per year respectively, at the time of application. The permittee has agreed to be subject to limitations in order to be below the major source applicability threshold for single HAP and particulate matter of 10 and 100 tons per year, respectively.
3. Any non compliance with any condition(s) of this permit set to restrain the “potential to emit” below the applicability thresholds of 1200-3-9-.02(11) of the Tennessee Air Pollution Control Regulations, shall be reported in writing to the Technical Secretary within fifteen working days of such discovery. This notification, at a minimum, shall include the identification of the source(s), identification of the permit condition(s) violated and details of the non-compliance (violation).
4. The Permittee is placed on notice that Conditions 7 and 8 of this operating permit contain limitations that allow the Permittee to opt out of the major source operating permit program requirements specified in Division Rule 1200-3-9-.02(11). Failure to abide by these limits will not only subject the Permittee to enforcement action by the State of Tennessee, but it may also result in the imposition of Federal enforcement action by the United States Environmental Protection Agency and the loss of being Federally recognized as a conditional major source.
5. A report stating the compliance status of this facility with permit Conditions 7 and 8 shall be submitted by March 31 of every year beginning in 2006. This report shall cover the preceding calendar year and shall include the records required by Conditions 55, 56, 57, 69, 71, and 72.

Submittals required by 40 CFR Part 63 subpart RRR shall be submitted as identified in this permit.

These reports shall be mailed to the following address:

Tennessee Division of Air Pollution Control  
East Tennessee Permitting Program  
9<sup>th</sup> Floor, L&C Annex  
401 Church Street  
Nashville, TN 37243-1531

6. Should proof of compliance for the pollutant with emission limitations placed on this permit be required, the emissions measuring test method(s) and procedures are the following:

Pollutant or Parameter	Testing Methodology
Particulate Matter	EPA Method 5 as published in the current 40 CFR 60, Appendix A
Visible Emissions	EPA Method 9 as published in the current 40 CFR 60, Appendix A
Total Fluorides	EPA Method 13 as published in the current 40 CFR 60, Appendix A
Dioxins and furans	EPA Method 23 as published in the current 40 CFR 60, Appendix A
Hydrogen Chloride & Chlorine	EPA Method 26 as published in the current 40 CFR 60, Appendix A
ACGIH Furnace Ventilation Standard	Published in “Industrial Ventilation A Manual of Recommended Practices”

7. Particulate emitted from this facility shall not exceed 72.0 tons during all intervals of 12 consecutive months.

Compliance with this condition may be assured by the maintaining the records and limits in Conditions 55, 69 and 70. (0.02 grain loading limitation)

This condition is established pursuant to Rule 1200-3-9-.02(11)(a) of the Tennessee Air Pollution Control Regulations, and the information contained in the agreement letter dated, September 30, 2004, by the permittee.

8. HAP emitted from this source shall not exceed a maximum of 7.9 tons for a single HAP and 10.4 tons for any combination of HAP, during all intervals of 12 consecutive months.

Compliance with this condition may be assured by maintaining the records and limits in Conditions 56, 57, 71 and 72.

This condition is established pursuant to Rule 1200-3-9-.02(11)(a) of the Tennessee Air Pollution Control Regulations, and the information contained in the agreement letter dated September 30, 2004, by the permittee.

9. Excess emissions shall be addressed as specified in Chapter 1200-3-20 of the Tennessee Air Pollution Control Regulations.
10. Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control devices. Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than five years.
11. Operation of each air contaminant source shall be in accordance with the provisions and stipulations set forth in the operation permit, all provisions of these regulations and all provisions of the Tennessee Air Quality Act. However, some excursions as defined in the operating permit, which occur during periodic monitoring for compliance assurance, may be excused by the Technical Secretary, and this authority is not extended to excursions that demonstrate noncompliance with an applicable emission limitation.
- “Excursion” shall mean a departure from an indicator range established for monitoring, consistent with any averaging period specified for averaging the results of the monitoring.
12. Due allowance for failure to monitor shall be made during any period of monitoring system malfunction, provided that the source owner or operator shows, to the satisfaction of the Technical Secretary, that the malfunction was unavoidable and is being repaired as expeditiously as practicable and that a log of all such malfunctions is being kept by the owner or operator, including time malfunction began, when it was detected, what was wrong, what was done to correct the malfunction, and when the malfunction was corrected.
13. This permit supersedes any previous permits for this facility.
14. The Permittee shall apply for renewal of this permit not less than 60 days prior to the permit's expiration date pursuant to Division Rule 1200-3-9-.02 (3).

Section II: The following conditions are specific to comply with 40 CFR Part 63 Subpart RRR (National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production)
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15. The Permittee must provide and maintain easily visible labels posted at each group 1 furnace and secondary aluminum processing unit (SAPU), that identifies the applicable emission limits and means of compliance, including:
- (a) The type of affected source or emission unit (*e.g.*, scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
  - (b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (*e.g.*, clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M (operation maintenance and monitoring) plan.

This requirement is established pursuant to 40 CFR §63.1506(b).

## 16. The Permittee must:

- (a) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice";
- (b) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- (c) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

This requirement is established pursuant to 40 CFR §63.1506(c).

## 17. The Permittee of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

- (a) Except as provided in paragraph 17(c) of this permit, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
- (b) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.
- (c) The Permittee may choose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:
  - (i) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and
  - (ii) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

This requirement is established pursuant to 40 CFR §63.1506(d).

## 18. The Permittee of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

- (a) If a bag leak detection system is used to meet the monitoring requirements in §63.1510, the Permittee must:
  - (i) Initiate corrective action within 1 hour of a bag leak detection system alarm.
  - (ii) Complete the corrective action procedures in accordance with the OM&M plan.
  - (iii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the Permittee takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
- (b) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 °C (plus 25 °F).
- (c) For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
- (d) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

This requirement is established pursuant to 40 CFR §63.1506(m).

## 19. When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&amp;M plan, the Permittee must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode

of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

This requirement is established pursuant to 40 CFR §63.1506(p).

20. The Permittee must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The Permittee must submit a revised OM&M plan to the Technical Secretary no later than 90 days after conducting the performance test. The Permittee of any new affected source must submit the OM&M plan to the Technical Secretary within 90 days after a successful initial performance test under §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. The plan must be accompanied by a written certification by the Permittee that the OM&M plan satisfies all requirements of this permit and is otherwise consistent with the requirements of this permit. The Permittee must comply with all of the provisions of the OM&M plan as submitted to the Technical Secretary, unless and until the plan is revised in accordance with the following procedures. If the Technical Secretary determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of this section or this permit, the Permittee must promptly make all necessary revisions and resubmit the revised plan. If the Permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the Permittee submits a description of the changes and a revised plan incorporating them to the Technical Secretary. Each plan must contain the following information:
- (a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
  - (b) A monitoring schedule for each affected source and emission unit.
  - (c) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in this permit.
  - (d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
    - (i) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
    - (ii) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of 40 CFR Part 63.
  - (e) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
  - (f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph 20(a) of this permit, including:
    - (i) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
    - (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
  - (g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
  - (h) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits.

This requirement is established pursuant to 40 CFR §63.1510(b).

21. The Permittee must inspect the labels for each group 1 furnace at least once per calendar month to confirm that posted labels as required by the operational standard in §63.1506(b) are intact and legible.

This requirement is established pursuant to 40 CFR §63.1510(b).

22. The Permittee must:

- (a) Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
- (b) Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in §63.1506(c) and record the results of each inspection.

This requirement is established pursuant to 40 CFR §63.1510(d).

23. The Permittee of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the Permittee may use a procedure acceptable to the Technical Secretary to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

- (a) The accuracy of the weight measurement device or procedure must be  $\pm 1$  percent of the weight being measured. The Permittee may apply to the Technical Secretary for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the Permittee provides assurance through data and information that the affected source will meet the relevant emission standard.
- (b) The Permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

This requirement is established pursuant to 40 CFR §63.1510(e).

24. The Permittee of an affected source or emission unit using a fabric filter or lime-injected fabric filter to comply with the requirements of this subpart must install, calibrate, maintain, and continuously operate a bag leak detection system as required in paragraph 24(a) of this permit or a continuous opacity monitoring system as required in paragraph 24(b) of this permit.

- (a) These requirements apply to the Permittee of a new or existing affected source or existing emission unit using a bag leak detection system.
  - (i) The Permittee must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
  - (ii) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
  - (iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
  - (iv) The bag leak detection system sensor must provide output of relative or absolute PM loadings.
  - (v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
  - (vi) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

- (vii) For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
  - (viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
  - (ix) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
  - (x) Following initial adjustment of the system, the Permittee must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.
- (b) These requirements apply to the Permittee of a new or existing affected source or an existing emission unit using a continuous opacity monitoring system.
- (i) The Permittee must install, calibrate, maintain, and operate a continuous opacity monitoring system to measure and record the opacity of emissions exiting each exhaust stack.
  - (ii) Each continuous opacity monitoring system must meet the design and installation requirements of Performance Specification 1 in appendix B to 40 CFR Part 60.
- (c) These requirements apply to the Permittee of a new or existing aluminum scrap shredder who conducts visible emission observations. The Permittee must:
- (i) Perform a visible emissions test for each aluminum scrap shredder using a certified observer at least once a day according to the requirements of Method 9 in appendix A to 40 CFR Part 60. Each Method 9 test must consist of five 6-minute observations in a 30-minute period; and
  - (ii) Record the results of each test.

This requirement is established pursuant to 40 CFR §63.1510(f).

25. These requirements apply to the Permittee of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter to comply with the requirements of this subpart.
- (a) The Permittee must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in subpart A of 40 CFR Part 63.
  - (b) The temperature monitoring device must meet each of these performance and equipment specifications:
    - (i) The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
    - (ii) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in §63.1512(n).
    - (iii) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

This requirement is established pursuant to 40 CFR §63.1510(h).

26. These requirements apply to the Permittee of an affected source or emission unit using a lime-injected fabric filter to comply with the requirements of this subpart.
- (a) The Permittee of a continuous lime injection system must verify that lime is always free-flowing by either:

- (i) Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8-hour periods, the owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period; or
  - (ii) Subject to the approval of the Technical Secretary, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the Permittee must promptly initiate and complete corrective action, or
  - (iii) Subject to the approval of the Technical Secretary, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the Permittee must promptly initiate and complete corrective action.
- (b) The Permittee of a continuous lime injection system must record the lime feeder setting once each day of operation.
- (c) A Permittee who intermittently adds lime to a lime coated fabric filter must obtain approval from the Technical Secretary for a lime addition monitoring procedure. The Technical Secretary will not approve a monitoring procedure unless data and information are submitted establishing that the procedure is adequate to ensure that relevant emission standards will be met on a continuous basis.

This requirement is established pursuant to 40 CFR §63.1510(i).

27. These requirements apply to the Permittee of a group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer. The Permittee must:

- (a) Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit.
  - (i) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.
  - (ii) The accuracy of the weight measurement device must be  $\pm 1$  percent of the weight of the reactive component of the flux being measured. The Permittee may apply to the Technical Secretary for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of  $\pm 1$  percent impracticable. A device of alternative accuracy will not be approved unless the Permittee provides assurance through data and information that the affected source will meet the relevant emission standards.
- (iii) The Permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
- (b) Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).
- (c) Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:
  - (i) Gaseous or liquid reactive flux other than chlorine; and
  - (ii) Solid reactive flux.
- (d) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).
- (e) The Permittee of a group 1 furnace or in-line fluxer performing reactive fluxing may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

This requirement is established pursuant to 40 CFR §63.1510(j).



28. These requirements apply to the Permittee of a sidewell group 1 furnace using add-on air pollution control devices. The Permittee must:

- (a) Record in an operating log for each charge of a sidewell furnace that the level of molten metal was above the top of the passage between the sidewell and hearth during reactive flux injection, unless the furnace hearth was also equipped with an add-on control device.
- (b) Submit a certification of compliance with the operational standards in §63.1506(m)(7) for each 6-month reporting period. Each certification must contain the information in §63.1516(b)(2)(iii).

This requirement is established pursuant to 40 CFR §63.1510(n).

29. Site-specific requirements for secondary aluminum processing units.

- (a) A Permittee of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with §63.1510(b), the following information:
  - (i) The identification of each emission unit in the secondary aluminum processing unit;
  - (ii) The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;
  - (iii) The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit;
  - (iv) Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and
  - (v) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in §63.1510(t).
- (b) The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:
  - (i) Any averaging among emissions of differing pollutants;
  - (ii) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;
  - (iii) The inclusion of any emission unit while it is shutdown; or
  - (iv) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations.
- (c) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the Permittee must submit a request to the Technical Secretary containing the information required by paragraph 29(a) of this permit and obtain approval of the Technical Secretary prior to implementing any revisions.

This requirement is established pursuant to 40 CFR §63.1510(s).

30. Except as provided in Condition 31 of this permit, the Permittee must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the Permittee must:

- (a) Calculate and record the total weight of material charged to each emission unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in Conditions 23 of this permit. If the Permittee chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.
- (b) Multiply the total feed/charge weight to the emission unit, or the weight of aluminum produced by the emission unit, for each emission unit for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emission unit (as determined during the performance test) to provide emissions for each emission unit for the 24-hour period, in pounds.

(c) Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU.

(d) Compute the 24-hour daily emission rate using Equation 1:

$$E_{day} = \frac{\sum_i^n (T_i \times ER_i)}{\sum_i^n T_i} \quad (\text{Eq. 1})$$

Where,

$E_{day}$  = The daily PM, HCl, or D/F emission rate for the secondary aluminum processing unit for the 24-hour period;

$T_i$  = The total amount of feed, or aluminum produced, for emission unit i for the 24-hour period (tons);

$ER_i$  = The measured emission rate for emission unit i as determined in the performance test (lb/ton or µg/Mg of feed/charge); and

$n$  = The number of emission units in the secondary aluminum processing unit.

(e) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.

This requirement is established pursuant to 40 CFR §63.1510(t).

31. As an alternative to the procedures of Condition 30 of this Permit, a Permittee may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit.

This requirement is established pursuant to 40 CFR §63.1510(u).

32. The Permittee of a lime-coated fabric filter that employs intermittent or noncontinuous lime addition may apply to the Administrator for approval of an alternative method for monitoring the lime addition schedule and rate based on monitoring the weight of lime added per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the Permittee provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

This requirement is established pursuant to 40 CFR §63.1510(v).

33. Prior to conducting any performance test required by this Permit, the Permittee must prepare a site-specific test plan which satisfies all of the requirements, and must obtain approval of the plan from the Technical Secretary pursuant to the procedures, set forth in 40 CFR §63.7(c).

This requirement is established pursuant to 40 CFR §63.1511(a).

34. Following approval of the site-specific test plan, the Permittee must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in §63.1515(b). The Permittee of any existing affected source for which an initial performance test is required to demonstrate compliance must conduct this initial performance test no later than the date for compliance established by §63.1501(a). A new performance test must be conducted within 180 days of the issuance of this permit. The performance test must include emission testing for hydrogen chloride, hydrogen fluoride and particulate matter in addition to the testing required by 40 CFR Part 63 Subpart RRR. This test will be used to demonstrate compliance with the opt out provisions of Title V and with Conditions 7 and 8 of this permit. The Permittee of any new affected source for which an initial performance test is required must conduct this initial performance test within 90 days after the date for compliance established by

§63.1501(b). Except for the date by which the performance test must be conducted, the Permittee must conduct each performance test in accordance with the requirements and procedures set forth in 40 CFR §63.7(c). Permittees of affected sources located at facilities which are area sources are subject only to those performance testing requirements pertaining to D/F.

The permittee may request additional time to conduct the performance test from the Technical Secretary so that the performance test for the new rotary furnace may be conducted at the same time.

- (1) The Permittee must conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.
- (2) Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.
- (3) Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle.
- (4) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.
- (5) Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

This requirement is established pursuant to 40 CFR §63.1511(b).

35. The Permittee must use the following methods in appendix A to 40 CFR part 60 to determine compliance with the applicable emission limits or standards.

This requirement is established pursuant to 40 CFR §63.1511(c).

36. The Permittee of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by §63.1510 that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator must use the appropriate procedures in this section and submit the information required by §63.1515(b)(4) in the notification of compliance status report. The Permittee may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the Technical Secretary:
  - (a) The complete emission test report(s) used as the basis of the parameter(s) is submitted.
  - (b) The same test methods and procedures as required by this subpart were used in the test.
  - (c) The Permittee certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.
  - (d) All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

This requirement is established pursuant to 40 CFR §63.1511(g).

37. The Permittee of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).
38. The Permittee of a group 1 furnace that processes only clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

39. The Permittee may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.
40. The Permittee of a sidewall group 1 furnace that conducts reactive fluxing (except for cover flux) in the hearth, or that conducts reactive fluxing in the sidewall at times when the level of molten metal falls below the top of the passage between the sidewall and the hearth, must conduct the performance tests required by Conditions 37 or 38 of this Permit, to measure emissions from both the sidewall and the hearth.

This requirement is established pursuant to 40 CFR §63.1512(d).

41. The Permittee must conduct performance tests as described in paragraphs (a) through (c) of this Condition. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and  $\mu\text{g TEQ/Mg}$  of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in §63.1510(t). A performance test is required for:

- (a) Each group 1 furnace processing only clean charge to measure emissions of PM and either:
  - (i) Emissions of HCl (for the emission limit); or
  - (ii) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).
- (b) Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:
  - (i) Emissions of HCl (for the emission limit); or
  - (ii) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).
- (c) Each in-line fluxer to measure emissions of PM and HCl.

This requirement is established pursuant to 40 CFR §63.1512(j).

42. During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the Permittee of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight. A Permittee that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.

This requirement is established pursuant to 40 CFR §63.1512(k).

43. The Permittee of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these procedures to establish an operating parameter value or range for the inlet gas temperature.
- (a) Continuously measure and record the temperature at the inlet to the lime-injected fabric filter every 15 minutes during the HCl and D/F performance tests;
  - (b) Determine and record the 15-minute block average temperatures for the 3 test runs; and
  - (c) Determine and record the 3-hour block average of the recorded temperature measurements for the 3 test runs.

This requirement is established pursuant to 40 CFR §63.1512(n).

44. The Permittee must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate.
- (a) Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl and D/F tests, determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

- (b) Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;
- (c) Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 2:

$$W_t = F_1 W_1 + F_2 W_2 \quad (\text{Eq. 2})$$

Where,

$W_t$  = Total chlorine usage, by weight;

$F_1$  = Fraction of gaseous or liquid flux that is chlorine;

$W_1$  = Weight of reactive flux gas injected;

$F_2$  = Fraction of solid reactive flux that is chlorine (e.g.,  $F = 0.75$  for magnesium chloride; and

$W_2$  = Weight of solid reactive flux.

- (d) Divide the weight of total chlorine usage ( $W_t$ ) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and
- (e) If a solid reactive flux other than magnesium chloride is used, the Permittee must derive the appropriate proportion factor subject to approval by the Technical Secretary.

This requirement is established pursuant to 40 CFR §63.1512(o).

45. The Permittee of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and D/F tests to establish an operating parameter value for the feeder setting for each operating cycle or time period used in the performance test.
- (a) For continuous lime injection systems, ensure that lime in the feed hopper or silo is free-flowing at all times; and
  - (b) Record the feeder setting for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

This requirement is established pursuant to 40 CFR §63.1512(p).

46. The Permittee of each scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace and in-line fluxer must submit the information described in §63.1515(b)(3) as part of the notification of compliance status report to document conformance with the operational standard in §63.1506(b).

This requirement is established pursuant to 40 CFR §63.1512(r).

47. The Permittee of a new or existing affected source or emission unit with an add-on control device must submit the information described in §63.1515(b)(2) as part of the notification of compliance status report to document conformance with the operational standard in §63.1506(c).

This requirement is established pursuant to 40 CFR §63.1512(s).

48. The Permittee must submit initial notifications to the Technical Secretary as described in paragraphs (a) through (g) of this Condition.
- (a) As required by §63.9(b)(1), the Permittee must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

- (b) As required by §63.9(b)(3), the Permittee of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is not required under §63.5(d), must provide notification that the source is subject to the standard.
- (c) As required by §63.9(b)(4), the Permittee of a new or reconstructed major affected source that has an initial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is required by §63.5(d) must provide the following notifications:
  - (i) Intention to construct a new major affected source, reconstruct a major source, or reconstruct a major source such that the source becomes a major affected source;
  - (ii) Date when construction or reconstruction was commenced (submitted simultaneously with the application for approval of construction or reconstruction if construction or reconstruction was commenced before the effective date of this subpart, or no later than 30 days after the date construction or reconstruction commenced if construction or reconstruction commenced after the effective date of this subpart);
  - (iii) Anticipated date of startup; and
  - (iv) Actual date of startup.
- (d) As required by §63.9(b)(5), after the effective date of this subpart, a Permittee who intends to construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it becomes an affected source subject to this subpart, must provide notification of the intended construction or reconstruction. The notification must include all the information required for an application for approval of construction or reconstruction as required by §63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.
  - (i) The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart; or
  - (ii) The application must be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and initial startup had not occurred before the effective date.
- (e) As required by §63.9(d), the Permittee must provide notification of any special compliance obligations for a new source.
- (f) As required by §63.9(e) and (f), the Permittee must provide notification of the anticipated date for conducting performance tests and visible emission observations. The Permittee must notify the Technical Secretary of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.
- (g) As required by §63.9(g), the Permittee must provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.

This requirement is established pursuant to 40 CFR §63.1515(a).

- 49. The Permittee must submit a notification of compliance status report within 60 days after the conducting the new performance test required by Condition 34. Each Permittee of a new affected source must submit a notification of compliance status report within 90 days after conducting the initial performance test required by §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a) through (j) of this Condition. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. If an Permittee submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

- (a) All information required in §63.9(h). The Permittee must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
- (b) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).
- (c) Unit labeling as described in §63.1506(b), including process type or furnace classification and operating requirements.
- (d) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (*e.g.*, lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
- (e) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in §63.1506(c).
- (f) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in §63.1510(f).
- (g) Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in §63.1505(e).
- (h) Manufacturer's specification or analysis documenting the design residence time of no less than 0.8 seconds and design operating temperature of no less than 1,600 °F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.
- (i) The OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).
- (j) Startup, shutdown, and malfunction plan, with revisions.

This requirement is established pursuant to 40 CFR §63.1515(b).

50. The Permittee must develop and implement a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The Permittee shall also keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include:

- (a) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
- (b) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

This requirement is established pursuant to 40 CFR §63.1516(a).

51. As required by §63.10(e)(3), the Permittee must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in §63.10(c). When no deviations of parameters have occurred, the Permittee must submit a report stating that no excess emissions occurred during the reporting period.

- (a) A report must be submitted if any of these conditions occur during a 6-month reporting period:
  - (i) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
  - (ii) The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

- (iii) The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.
  - (iv) An excursion of a compliant process or operating parameter value or range (*e.g.*, lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
  - (v) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3).
  - (vi) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart.
  - (vii) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.
- (b) Each report must include each of these certifications, as applicable:
- (i) For each thermal chip dryer: “Only unpainted aluminum chips were used as feedstock in any thermal chip dryer during this reporting period.”
  - (ii) For each dross-only furnace: “Only dross was used as the charge material in any dross-only furnace during this reporting period.”
  - (iii) For each sidewall group 1 furnace with add-on air pollution control devices: “Each furnace was operated such that the level of molten metal remained above the top of the passage between the sidewall and hearth during reactive fluxing, and reactive flux, except for cover flux, was added only to the sidewall or to a furnace hearth equipped with an add-on air pollution control device for PM, HCl, and D/F emissions during this reporting period.”
  - (iv) For each group 1 melting/holding furnace without add-on air pollution control devices and using pollution prevention measures that processes only clean charge material: “Each group 1 furnace without add-on air pollution control devices subject to emission limits in §63.1505(i)(2) processed only clean charge during this reporting period.”
  - (v) For each group 2 furnace: “Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period.”
  - (vi) For each in-line fluxer using no reactive flux: “Only nonreactive, non-HAP-containing, non-HAP-generating flux gases, agents, or materials were used at any time during this reporting period.”
- (c) The Permittee must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

This requirement is established pursuant to 40 CFR §63.1516(b).

52. For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the Permittee must certify continuing compliance based upon, but not limited to, the following conditions:
- (a) Any period of excess emissions, as defined in paragraph 51(a) of this Permit, that occurred during the year were reported as required by this subpart; and
  - (b) All monitoring, recordkeeping, and reporting requirements were met during the year.

This requirement is established pursuant to 40 CFR §63.1516(c).

53. As required by §63.10(b), the Permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.



- (a) The Permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
- (b) The Permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
- (c) The Permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

This requirement is established pursuant to 40 CFR §63.1517(a).

54. In addition to the general records required by §63.10(b), the Permittee of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records of:

- (a) For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter:
  - (i) If a bag leak detection system is used, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
  - (ii) If a continuous opacity monitoring system is used, records of opacity measurement data, including records where the average opacity of any 6-minute period exceeds 5 percent, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.
  - (iii) If an aluminum scrap shredder is subject to visible emission observation requirements, records of all Method 9 observations, including records of any visible emissions during a 30-minute daily test, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.
- (b) For each affected source with emissions controlled by an afterburner:
  - (i) Records of 15-minute block average afterburner operating temperature, including any period when the average temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and
  - (ii) Records of annual afterburner inspections.
- (c) For each scrap dryer/delacquering kiln/decoating kiln and group 1 furnace, subject to D/F and HCl emission standards with emissions controlled by a lime-injected fabric filter, records of 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value +14 °C (+25 °F), with a brief explanation of the cause of the excursion and the corrective action taken.
- (d) For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:
  - (i) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;
  - (ii) If lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken.
  - (iii) If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in §63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge).
- (e) For each group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including

records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.

- (f) For each continuous monitoring system, records required by §63.10(c).
- (g) For each affected source and emission unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.
- (h) Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan.
- (i) Records of all charge materials for each thermal chip dryer, dross-only furnace, and group 1 melting/holding furnaces without air pollution control devices processing only clean charge.
- (j) Operating logs for each group 1 sidewall furnace with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewall and hearth during reactive flux injection and for adding reactive flux only to the sidewall or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions.
- (k) For each in-line fluxer for which the owner or operator has certified that no reactive flux was used:
  - (i) Operating logs which establish that no source of reactive flux was present at the in-line fluxer;
  - (ii) Labels required pursuant to §63.1506(b) which establish that no reactive flux may be used at the in-line fluxer; or
  - (iii) Operating logs which document each flux gas, agent, or material used during each operating cycle.
- (l) Records of all charge materials and fluxing materials or agents for a group 2 furnace.
- (m) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
- (n) Records of annual inspections of emission capture/collection and closed vent systems.
- (o) Records for any approved alternative monitoring or test procedure.
- (p) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
  - (i) Startup, shutdown, and malfunction plan;
  - (ii) OM&M plan; and
  - (iii) Site-specific secondary aluminum processing unit emission plan (if applicable).
- (q) For each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

This requirement is established pursuant to 40 CFR §63.1517(b).

### Section III: Source specific emission standards

53-0079-02: Two rotary furnaces with lime injected baghouse (BH-1) for control (SAPU) secondary aluminum processing unit with bale breaker (070), air knife (090) and associated material handling equipment (two heat sources at 20 million Btu per hour each)

55. Particulate matter emitted from this source shall not exceed 0.02 grains per dry standard cubic feet (13.7 pound per hour).

This emission limitation is established pursuant to Rule 1200-3-7-.04(1) of the Tennessee Air Pollution Control Regulations.

Compliance with this requirement shall be assured by operating the control equipment within the operating parameters identified in the most recent approved performance test. This permit condition will be amended to include the specific operating and control parameters determine during the performance test and required record keeping.

56. Hydrogen chloride emitted from this source shall not exceed 1.4 pounds per hour (6.132 tons per year).

This emission limitation is established pursuant to Rule 1200-3-9-.02(11)(a) and 1200-3-7-.07(2) of the Tennessee Air Pollution Control Regulations.

Compliance with this requirement shall be assured by operating the control equipment within the operating parameters identified in the most recent approved performance test. The operating parameters include: lime injection rate and flux usage rate. This permit condition will be amended to include the specific operating and control parameters determine during the performance test and required record keeping.

57. Hydrogen fluoride emitted from this source shall not exceed 0.201 pounds per hour (0.881 tons per year).

This emission limitation is established pursuant to Rule 1200-3-9-.02(11)(a) and 1200-3-7-.07(2) of the Tennessee Air Pollution Control Regulations.

Compliance with this requirement shall be assured by operating the control equipment within the operating parameters identified in the most recent approved performance test. The operating parameters include: lime injection rate and flux usage rate. This permit condition will be amended to include the specific operating and control parameters determine during the performance test and required record keeping.

58. Dioxins and furans TEQ (the international method of expressing toxicity equivalents for dioxins and furans) emitted from this source shall not exceed 15 µg of D/F TEQ per Mg ( $2.1 \times 10^{-4}$  gr of D/F TEQ per ton) of feed/charge.

This emission limitation is established pursuant to 40 CFR §63.1505(i)(3).

Compliance with this requirement shall be assured by operating the furnaces and control equipment within the parameters identified during the most recent approved performance test. This permit condition will be amended to include the specific operating and control parameters determine during the performance test and required record keeping.

59. Natural gas or propane only shall be used as fuel(s) for this source.

This emission limitation is established pursuant to Rule 1200-3-7-.01(5) of the Tennessee Air Pollution Control Regulations.

Compliance with this requirement shall be assured by maintaining records of fuel usage.

60. Visible emissions from the source (baghouse stack and any opening of the building containing this source) shall not exceed ten (10) percent or greater opacity as determined by EPA Method 9, as published in the current 40 CFR Part 60, Appendix A. (6 minute average)

This emission limitation is established pursuant to Rule 1200-3-5-.01(3) of the Tennessee Air Pollution Control Regulations and the information contained in the agreement letter dated March 6, 1995 from the permittee.

61. Visible emissions from the source (baghouse stack and any opening of the building containing this source) shall not exceed ten (10) percent or greater opacity as determined by EPA Method 9, as published in the current 40 CFR Part 60, Appendix A. (6 minute average)

This emission limitation is established pursuant to Rule 1200-3-5-.01(3) of the Tennessee Air Pollution Control Regulations and the information contained in the agreement letter dated March 6, 1995 from the permittee.

62. Visible emissions from road(s) associated with the operation of this source shall meet 10% opacity utilizing Tennessee Visible Emission Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982, and as amended on August 24, 1984.

This emission requirement is established pursuant to the previous permit number 946708P.

63. The exhaust gases from this source shall be discharged unobstructed vertically upwards to the ambient air from the stack with an exit diameter (equivalent) of 48.8 inches not less than 49 feet above ground level.

This emission requirement is established pursuant to the previous permit number 946708P.

64. The average pressure drop across the baghouse shall be kept at least at five (5) pounds per square inch (psi) during the operation of this source.

This emission requirement is established pursuant to the previous permit number 946708P.

This permit condition may be amended to include a new specific value for pressure drop determined during the performance test.

65. The permittee shall monitor and record the pressure drop across the baghouse on an intermittent basis in a manner and with instrumentation acceptable to the Technical Secretary. All data shall be kept on file for a period of not less than five (5) years and made available to the Technical Secretary or his representative upon request. As a minimum, pressure drop shall be recorded every morning prior to 8:00 AM, during the second shift, prior to and immediately after each shake.

This emission requirement is established pursuant to the previous permit number 946708P.

This permit condition may be amended based on the results of the performance test.

66. The temperature of gases entering the baghouse shall not exceed the value determined during the performance test plus 25°F during normal operation. The permittee shall monitor and record the baghouse temperature on an intermittent basis in a manner and with instrumentation acceptable to the Technical Secretary. All data shall be kept on file for a period of not less than five (5) years and made available to the Technical Secretary or his representative upon request.

This emission requirement is established pursuant to the previous permit number 946708P.

This permit condition may be amended based on the results of the performance test.

67. The baghouse shall be coated daily. The average lime injection rate shall be based on the results of the performance test. An appropriate log of the coating process shall be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five years. Failure to properly maintain the required records shall be a violation of this permit.

This emission requirement is established pursuant to the previous permit number 946708P.

This permit condition will be amended to include the specific operating and control parameters determined during the performance test.

68. Aluminum dross and the dross generated by the source shall be stored in building(s) completely enclosed on three (3) sides. There shall be no visible emissions from the storage facilities. Compliance with this standard shall be determined using Tennessee Visible Emission Evaluation Method 3.

This emission requirement is established pursuant to the previous permit number 946708P.

53-0079-03: One reverberatory furnace (side well) with lime injected baghouse for control (BH-2) (Group 1 furnace) 30 million Btu per hour heater, process vents through baghouse stack S-2 and burner vents through stack S-3

69. Particulate matter emitted from the aluminum process shall not exceed 0.02 grains per dry standard cubic feet (4.68 pound per hour).

This emission limitation is established pursuant to Rule 1200-3-7-.04(1) of the Tennessee Air Pollution Control Regulations.

Compliance with this requirement shall be assured by operating the control equipment within the operating parameters identified in the most recent approved performance test. This permit condition will be amended to include the specific operating and control parameters determine during the performance test and required record keeping.

70. Particulate matter emitted from the heater shall not exceed 1.0 tons per year.

This emission limitation is established pursuant to Rule 1200-3-6-.07(1) of the Tennessee Air Pollution Control Regulations.

Compliance with this requirement shall be assured burning natural gas or propane only and using AP-42 emission factors.

71. Hydrogen chloride emitted from this source shall not exceed 0.25 pounds per hour (1.095 tons per year).

This emission limitation is established pursuant to Rule 1200-3-9-.02(11)(a) and 1200-3-7-.07(2) of the Tennessee Air Pollution Control Regulations.

Compliance with this requirement shall be assured by operating the control equipment within the operating parameters identified in the most recent approved performance test. The operating parameters include: lime injection rate and flux usage rate. This permit condition will be amended to include the specific operating and control parameters determine during the performance test and required record keeping.

72. Hydrogen fluoride emitted from this source shall not exceed 0.30 pounds per hour (1.31 tons per year).

This emission limitation is established pursuant to Rule 1200-3-9-.02(11)(a) and 1200-3-7-.07(2) of the Tennessee Air Pollution Control Regulations.

Compliance with this requirement shall be assured by operating the control equipment within the operating parameters identified in the most recent approved performance test. The operating parameters include: lime injection rate and flux usage rate. This permit condition will be amended to include the specific operating and control parameters determine during the performance test and required record keeping.

73. Dioxins and furans TEQ (the international method of expressing toxicity equivalents for dioxins and furans) emitted from this source shall not exceed 15 µg of D/F TEQ per Mg ( $2.1 \times 10^{-4}$  gr of D/F TEQ per ton) of feed/charge.

This emission limitation is established pursuant to 40 CFR §63.1505(i)(3).

Compliance with this requirement shall be assured by operating the furnace and control equipment within the parameters identified during the most recent approved performance test. This permit condition will be amended to include the specific operating and control parameters determine during the performance test and required record keeping.

74. Natural gas or propane only shall be used as fuel(s) for this source.

This emission limitation is established pursuant to Rule 1200-3-7-.01(5) of the Tennessee Air Pollution Control Regulations.

Compliance with this requirement shall be assured by maintaining records of fuel usage.

75. Volatile Organic Compounds (including THC-as Carbon) emitted from the aluminum process shall not exceed 2.0 pounds per hour and 8.76 tons per year.

This emission requirement is established pursuant to the previous permit number 946783P.

Compliance with this requirement shall be assured by operating the furnace and control equipment within the parameters identified during the most recent approved performance test. This permit condition will be amended to include the specific operating and control parameters determine during the performance test and required record keeping.

76. Visible emissions from the source (baghouse stack and any opening of the building containing this source) shall not exceed ten (10) percent or greater opacity as determined by EPA Method 9, as published in the current 40 CFR Part 60, Appendix A. (6 minute average)

This emission limitation is established pursuant to Rule 1200-3-5-.01(3) of the Tennessee Air Pollution Control Regulations and the information contained in the agreement letter dated March 6, 1995 from the permittee.

77. Visible emissions from road(s) associated with the operation of this source shall meet 10% opacity utilizing Tennessee Visible Emission Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982, and as amended on August 24, 1984.

This emission requirement is established pursuant to the previous permit number 946783P.

78. The exhaust gases from this source shall be discharged unobstructed vertically upwards to the ambient air from two stacks with its exit diameter of 40 inches not less than 35 feet above ground level (S-2) and with its exit diameter of 19.1 inches (equivalent) not less than 54 feet above ground level (S-3) respectively.

This emission requirement is established pursuant to the previous permit number 946783P.

79. The owner or operator shall determine the base line average value for operating pressure drop across the baghouse during the performance test required by Condition 34.

80. If approved by the Division, the value of the pressure drop of the baghouse determined by the source test shall be maintained during the operation of this source. The permittee shall monitor and record the pressure drop across the baghouse on an intermittent basis in a manner and with instrumentation acceptable to the Technical Secretary. All data shall be kept on file for a period of not less than five (5) years and made available to the Technical Secretary or his representative upon request. As a minimum, pressure drop shall be recorded every morning prior to 8:00 AM, during the second shift, prior to and immediately after each shake.

This emission requirement is established pursuant to the previous permit number 946783P.

This permit condition may be amended based on the results of the performance test.

81. The temperature of gases entering the baghouse shall not exceed the value determined during the performance test plus 25°F during normal operation. The permittee shall monitor and record the baghouse temperature on an intermittent basis in a manner and with instrumentation acceptable to the Technical Secretary. All data shall be kept on file for a period of not less than five (5) years and made available to the Technical Secretary or his representative upon request.

This emission requirement is established pursuant to the previous permit number 946783P.

This condition will be amended based on the results of the performance test.

82. The baghouse shall be coated daily. The average lime injection rate to the baghouse shall be determined during the performance test required by Condition 34. An appropriate log of the coating process shall be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years. Failure to properly maintain the required records shall be a violation of this permit.

This emission requirement is established pursuant to the previous permit number 946783P.

This condition will be amended based on the results of the performance test.

83. Aluminum dross and the dross generated by the source shall be stored in building(s) completely enclosed on three (3) sides. There shall be no visible emissions from the storage facilities. Compliance with this standard shall be determined using Tennessee Visible Emission Evaluation Method 3.

This emission requirement is established pursuant to the previous permit number 946783P.

(End of conditions)